

### PADEL

Ventilation and climate solutions for padel halls



## The optimum choice

The feature that distinguishes a padel court most clearly is perhaps the large glass surfaces that define the playing area. One of the challenges is ensuring that air reaches down into the "padel box", into the occupied zone. Above all, this is important to enable optimum performance, but also to ensure that the glass does not mist up. It is particularly important to take this into account when the hall is to be air conditioned, i.e. heated or cooled, using the ventilation air.

As padel has been developed in part as a social activity, at least in the Nordic countries, it is common for padel halls to offer more than just the playing courts themselves. There may be cafés, shops, office and conference areas, all alongside the essential facilities such as changing rooms and toilets. Regardless of whether a padel hall is being built for playing or for socialising around the sport, optimisation of the space is important. The most common requirement is to have space for as many courts as possible, without compromising on accessibility between them.

In order to create an optimum indoor climate throughout the hall and in the occupied zone in each padel court, it is important to identify various areas based on their intended function and activity. Once these are known, separate climate zones with varying conditions can be created, and solutions can be selected that are adapted to the needs of each climate zone.

Here at Swegon, we possess both the knowledge and the experience of creating optimum indoor climates in sports facilities and arenas. Our range of products, systems and services make it possible to satisfy the wishes of each unique project. This guide suggests a few solutions for padel halls in particular.

### The importance of a good indoor climate in a padel hall



Good access to fresh air is crucial when it comes to performing at your best. We recommend an air flow of 500 I/s per court when in active use, which is demand-controlled by the indoor temperature and the  $CO_2$  content in the hall.\*

\*For reference, 500 I/s for a property in central Sweden is calculated with a U-value of approx. 0.2 W/m²K.



Physical activity requires 3 times as much air as the amount recommended for office and school premises, for example.



The padel hall is often intended for more than just the game itself, with comfort in all parts of the hall being important in order for visitors to return.

"Each player needs up to 30 litres of air per second"

# Choice of products for your system

Air handling units can be selected for heating or ventilation only, or complete with ventilation, heating and cooling. Monitoring and settings can be performed easily using a web solution.



### It is important to select supply air diffusers that have a sufficiently long throw length, in order to get the fresh air down into the occupied zone.



### Using a reversible heat pump, you can produce both heating and cooling for your padel hall.

BlueBox ZETA SKY	BlueBox ZETA Re	W HP XT Blue	Box TITAN SKY
	ZETA SKY	ZETA REV HP XT	titan sky
Capacity, cooling, kW	30-230	40-200	30-200
Cold water	-8 up to 20°C	-20 up to 55°C	-20 up to 50°C
Hot water	up to 60°C	up to 65°C	up to 63°C

**AIR HANDLING UNITS** 

....



#### Padel hall with lounge and changing area

A complete solution for a hall with a lounge and changing facilities provides the perfect indoor climate for all parts of the hall. Ventilation units for ventilation and separate heat pump/chiller for air conditioning and hot water. Air conditioning the hall via recirculation unit GOLD SD or GOLD RX/ReCO<sub>2</sub>. Changing area cooled via chilled supply air and heating through radiators or underfloor heating.

- GOLD RX and GOLD RX/ReCO₂ for ventilation.
- GOLD SD and GOLD RX for ventilation and air conditioning the hall, cooling/heating.
- BlueBox heat pump/chiller for cooling and heating production as well as hot water.
- Supply and extract air diffusers for ventilation and air conditioning the entire facility.
- + Total solution supplied for heating, cooling and hot water from a single supplier.
- + A solution for people who value the perfect indoor climate and a low operating cost.
- + Demand-controlled air conditioning via recirculation saves energy.

# **Premium Plus**

#### Padel hall with lounge and changing area

The hall is ventilated and air conditioned (heating/cooling) with supply air diffusers that have a long throw length and are evenly distributed for optimum function. The extract air is evacuated centrally in the vicinity of the fan room. X-zone functionality provides the potential to air condition the hall separately from other occupied areas, such as changing rooms, the lounge or a conference room. The proportion of fresh air is adapted according to need in order to save energy when there is a low load. The supply air is cooled or heated by the built-in heat pump in the ventilation unit.







#### Hall with heating and air conditioning

Ventilation unit with reversible heat pump for ventilation and air conditioning the hall (GOLD RX/HC).

Alternatively, ventilation unit for ventilation and separate heat pump/chiller for air conditioning. Heating and cooling the hall via the ventilation system.

- GOLD RX/HC with built-in cooling and heating.
- Alternatively, BlueBox heat pump/chiller in combination with GOLD RX/ReCO2.
- Supply and extract air diffusers for ventilation and air conditioning the hall.
- + Rapid installation ensures a low investment cost.
- May require separate system for the changing room, for example.

# Premium 1

#### Hall with heating and air conditioning

The hall is ventilated and air conditioned (heating/cooling) with supply air diffusers that have a long throw length and are evenly distributed for optimum function. The extract air is evacuated centrally in the vicinity of the fan room. The supply air is cooled or heated by the built-in heat pump in the ventilation unit.



## Premium 2

#### Hall with heating and air conditioning

The hall is ventilated and air conditioned (heating/cooling) with supply air diffusers that have a long throw length and are evenly distributed for optimum function.

The extract air is evacuated centrally in the vicinity of the fan room.

The supply air is cooled or heated by an external reversible heat pump/ chiller. The amount of fresh air can be varied according to need ( $CO_2$ ) via built-in recirculation function.





#### Hall with separate heating

Ventilation unit where heating of the hall takes place via a separate heating system, such as fan heaters, ceiling strips, radiators, etc.

- GOLD RX or GLOBAL RX ventilates the hall while it is in use.
- BlueBox heat pump or other heat source.
- Supply and extract air diffusers for ventilating the hall, or ceiling strips for heating.
- + Rapid installation ensures a low investment cost.

- Covers ventilation and heating requirements, not air conditioning (cooling) the hall.

## Standard 1

#### Hall with separate heating

The hall is ventilated with supply air diffusers that have a long throw length and are evenly distributed for optimum function. The extract air is evacuated centrally in the vicinity of the fan room. The premises are heated using heating strips in the ceiling. Heating production takes place either via a separate heat pump or an alternative heat source.



### Standard 2

#### Hall with separate heating

The hall is ventilated with supply air diffusers that have a long throw length and are evenly distributed for optimum function. The extract air is evacuated centrally in the vicinity of the fan room. The premises are heated via air heaters along the wall where it meets the ceiling. Heating production takes place either via a separate heat pump or an alternative heat source.



## Feel good **inside**



